

INDIVIDUALIZED ELECTRONIC COMMERCIALS**Field of The Invention**

The field of the invention is electronic direct marketing.

Background of The Invention

5 Direct marketing is a well known method of promotion which is relied on heavily to relay messages, particularly commercial and political messages, to the public. An example of direct marketing is the "commercial" which is an advertisement on television or radio. Over the years advances in computer and other technologies have altered the systems and methods by which direct marketing is implemented. Most recently, the widespread implementation of
10 public electronic networks such as the Internet have significantly opened the field of electronic direct marketing. As a result, an "ecommercial", i.e. an advertisement on a public electronic network such as the Internet, is now a common direct marketing tool. Ecommercials, as with radio and television commercials of the past, are not necessarily limited to selling products but also include, among others, promoting non-profit and or
15 political goals.

Some of the ecommerical providers currently in existence include *RadicalMail.com*, *EmailDirect.com*, *Auraline.com*, and *E-troop.com*. Although the ecommercials provided by these providers are acceptable in many ways, they are not acceptable for all messages.

A common shortcoming of known ecommercials is their failure to adequately target
20 individuals or small groups. Utilizing the same ecommercial for too large a group results in the commercial being relatively ineffective for a significant portion of the group.

Thus there is a continuing need for new types of ecommercials and associated methods to overcome the deficiencies of known commercials and methods, particularly in regard to being able to target individuals and/or small groups.

Summary of the Invention

5 The present invention provides electronic commercials (ecommercials) and related methods in which a plurality of targeted prospects are selected for an advertising campaign, multiple commercials are automatically assembled for the campaign based upon varying characteristics of the targeted prospects, and the prospects are sent electronic commercials corresponding to their particular characteristics.

10 The commercials are preferably transmitted as executable files, some or all of which can be authenticated.

 In another aspect of the inventive subject matter the marketing characteristic or characteristics used to produce the different commercials can be any combination of age, sex, and income, or any other marketing characteristics. Such characteristics advantageously
15 include data obtained from responses to previous electronic commercials, and stored in a prospect database.

 The multiple commercials can differ in only one component or in more than one component. Especially contemplated are multiple commercials that differ in several components, including at least three visual components and at least one audio component.
20 Also especially contemplated are multiple commercials that differ from one another by the content of their video or audio clips, such as by the language employed in an audio clip. As used herein, a component can be any subset of data suitable for inclusion in a commercial

including, among others, audio, video, and audio-video data such as film clips and soundtracks.

In another aspect of the inventive subject matter the automatic assembling of the multiple commercials occurs in relatively close temporal proximity to their transmission. In especially preferred embodiments at least 10% of the commercials are transmitted to at least some of the targeted recipients within 24 hours, and more preferably within 2 hours, of their production. Viewed from another perspective, it is preferred that on average at least one commercial is assembled for every 500 of the targeted prospects, more preferably one commercial for every 50 prospects, and still more preferably one commercial for every 10 prospects.

Various objects, features, aspects, and advantages of the present invention will become more apparent from the following detailed description of preferred embodiments of the invention, along with the accompanying drawings in which like numerals represent like components.

15 **Brief Description of the Drawing**

Fig. 1 is a schematic of a system and method for tracking ecommercials.

Detailed Description

In Figure 1 an electronic mailing system 1 sends ecommercials to a plurality of prospects. The system 1 generally includes a control subsystem 10 that selects both advertising messages from an advertising messages database 20, and a set of targeted prospects from a prospects database 30. The control subsystem 10 also controls a modification subsystem 40 for modifying the commercial being sent, an authentication subsystem 50 for authenticating the transmissions, and a transmission subsystem 60 for

transmitting the finished commercials to the prospects. Tracking is provided by tracking subsystem 70. Prospects that receive the commercial are referred to as recipients 110.

The term "advertisers" is used herein in the broadest possible sense, including any entity trying to impact the thinking or behavior of others. In many instances the desired impact will include motivating the recipient to purchase goods or services. In other instances the desired impact may be to cause the recipient to vote in a given manner in an election, or a poll. In still other instances the desired impact may be of a very general nature, perhaps increasing societal awareness of alcoholism.

The term "commercial" is used herein in a very broad sense to mean any message intending to motivate a recipient to take an action favorable to an advertiser. Commercials may be simple textual banner ads, but more preferably include rich-media graphics such as animation, a photograph or other image, or an audio tract. Still more preferred commercials include video and branding graphics. Especially preferred commercials will be those that communicate a value proposition communicated in 30 seconds or less. Currently the most preferred commercials include an audio tract, a video tract, branding graphics, and hyperlinks, all delivered in a single executable file. These and other embodiments are as described in concurrently filed application serial nos. ____ and ____, corresponding to attorney docket 604.07 and 604.08, respectively which are incorporated herein by reference. Still other preferred embodiments include "slide-show" commercials as described in concurrently filed application serial no. ____ corresponding to attorney docket 604.09, which is incorporated herein by reference.

The control subsystem 10 is a software application, generally comprising numerous programs, data structures, and so forth. The code is preferably written in a high level language such as "C" or "C++", and includes other languages, routines, and libraries as appropriate.

The advertising messages database 20 stores advertising content used in preparing ecommercials. The content typically includes text, charts, graphics, video, and audio components, but may also include any other components that can be sent via electronic mail. Preferred advertising messages database 20 contains both finished commercials and portions

of commercials that can be combined together to produce finished commercials. It is especially contemplated that audio and video tracks are included in at least some of the components and finished commercials. The advertising messages database 20 may be quite large. Finished commercials may run about 30 seconds of play time, and with current
5 compression technologies, may require about 0.5 to 1.0 megabyte of storage space per commercial. Depending on how many commercials are being handled, and how many variations are being stored, the advertising messages database 20 may easily require 50 - 100 giga bytes of storage space.

The prospects database 30 is essentially an electronic address book, containing
10 electronic mailing addresses for individuals, businesses, organizations, and so forth. Some or all of the prospects may have opted into the mailing list, or into another group that may or may not have any relationship to the advertising content. The prospects database 30 may be entirely proprietary to the owner of the system 1, or it may be obtained from an outside source. It is also contemplated that the prospects database 30 may comprise some or all of a
15 co-sponsorship database as described in concurrently filed application titled "Custodial Database for On-Line Marketing", corresponding to attorney docket 604.16, which is incorporated herein by reference.

The modification subsystem 40 optionally modifies the commercial or commercials being sent out, possibly under the direct control of an operator (not shown). Operator control
20 allows commercials to be constructed as needed to satisfy the needs of various advertisers. It is contemplated, for example, that an operator may create a commercial in only a few minutes by selecting from stock audio tracks, backgrounds, video clips, and animation or other graphics that may be included in the advertising messages database 20. Such components may or may not be advertiser-specific.

In another aspect of the inventive subject matter the marketing characteristic or characteristics used to produce the different commercials can be any combination of age, sex, and income, or any other marketing characteristics. Such characteristics advantageously include data obtained from responses to previous electronic commercials, and stored in a prospect database.

The multiple commercials can differ in only one component or in more than one component. Especially contemplated are multiple commercials that differ in several components, including at least three visual components and at least one audio component. Also especially contemplated are multiple commercials that differ from one another by the content of their video or audio clips, such as by the language employed in an audio clip.

In another aspect of the inventive subject matter the automatic assembling of the multiple commercials occurs in relatively close temporal proximity to their transmission. In especially preferred embodiments at least 10% of the commercials are transmitted to at least some of the targeted recipients within 24 hours, and more preferably within 2 hours, and still more preferably within 30 minutes of their production. Viewed from another perspective, it is preferred that on average at least one commercial is assembled for every 500 of the targeted prospects, more preferably one commercial for every 50 prospects, and still more preferably one commercial for every 10 prospects.

The term "advertisers" is used herein in the broadest possible sense, including any entity trying to impact the behavior of people. In many instances the desired impact will include motivating the recipient to purchase goods or services. In other instances the desired impact may be to cause the recipient to vote in a given manner in an election, or a poll. In

still other instances the desired impact may be of a very general nature, perhaps increasing societal awareness of alcoholism.

Finished commercials may also be modified on an as needed basis ("on the fly") under automatic control of the control subsystem 10. One possible modification involves changing the language of the commercial from English to Spanish for Spanish speaking prospects. Other contemplated modifications may substitute different visual or audio background tracks, or video clips depending on the age or sex of individual prospects. These and other modifications may be triggered by information contained in the prospects database 30.

10 A modification of particular interest is inclusion of an identification code in an ecommercial. Such codes serve to individually link preferences, interests or other data obtained from previous advertising campaigns with particular records in the prospects database 30. If, for example, a recipient indicated in response to a previous campaign that he has no interest in certain types of clothing, that information could advantageously be stored in
15 the prospects database 30, and employed in subsequent campaigns to avoid sending that person advertisements relating to such clothing.

Inclusion of identification codes can be accomplished in many different ways. One of the simplest methods is to insert identification codes as literals within the commercials. When a commercial is viewed, the accompanying software can record the recipient's activities as
20 tracking data, and then send the tracking data back to the tracking system 70 along with the identification code. More preferably, the identification code can be stored locally to the recipient, and the occurrence of that storage can be recorded in the corresponding prospects database 30 record. When preparing subsequent commercials such records can be reviewed to

discover that an identification number was already stored for a particular prospect, thus obviating the need to modify the new commercial to include a new identification code. Thus, where an advertiser requires individual recipient tracking, the commercials would need to be modified only for those prospects for which an identification code was not already stored at the recipient's end.

Another method of providing identification codes takes advantage of the fact that not all advertisers are interested in tracking individual responses. In such cases commercials can be sent out in groups, of perhaps a thousand at a time. Each commercial in a group would contain a group identification code, and that code would also be recorded in the individual records of the prospects database 30 for all prospects targeted in the group. Upon receipt and opening of the commercial, the group number would also be recorded locally to the recipients. The first time that tracking data is uploaded, from those recipients, the tracking system 70 would not be able to correlate individual tracking information with individual prospects. The next time a commercial is sent, however, the groups are chosen such that they include different sets of prospects from the first time around. Once again a group identification is included in the commercial, transmitted to the prospects in the group, and recorded locally to the recipients. But this time when the tracking information is sent back to the tracking system 70, the recipient transmits two group identification numbers, which can likely be used to identify the specific corresponding record in the prospects database 30. If a specific match cannot be made for a given prospect after the second commercial, possibly because multiple prospects were included in the same groups, a third or subsequent group commercial will provide sufficient information to identify the specific prospect. Alternatively, other information besides a second group identification code (such as the initials of a recipient's name that might be provided by the recipient) could be used in

conjunction with the first group identification code to match up a particular recipient with a particular prospect. Ideally, the software would have also created a unique identification code that was stored along with the group numbers. Once a positive match between recipient and prospect is made, the group numbers can be deleted from the recipient's system, and the
5 unique identification code can be used from then on.

Other possibilities are also contemplated. One possibility is that software downloaded with the commercial could ping a web site, and obtain the recipient's e-mail address by observing the return information from the ping. Another possibility is that recipients of future systems will include a public area on their computers that provides information about
10 the recipient for use by the outside world. That information can be used to correlate a recipient with a given record in the prospects database 30.

The authentication subsystem 50 optionally authenticates commercials being transmitted, as for example with a Verisign™ digital signature. This is important because many firewalls are configured to filter out messages that are not authenticated. Not all
15 commercials need to be authenticated, however, and a majority of such commercials may not be authenticated due to the substantial overhead costs required. The authentication decision can be made on a campaign basis, but is preferably made on an individual basis, possibly relying on data stored in the prospects database 30 or the tracking subsystem 70.

Decisions with respect to modification of a commercial to include an identification
20 number, and authentication of the commercial in a transmission may be overlapping. Once the tracking system has established that a recipient has stored the identification code, it is unnecessary to keep adding an identification code to the commercial, and re-authenticating the commercial. Transmissions to that recipient can be identical to those sent to other

recipients because the previously stored identification code can still be used to link the tracking data with the particular recipient.

The tracking subsystem 70 is also contemplated to be a software application comprising numerous programs, data structures, and so forth. As with the control subsystem 10, the code is preferably written in a high level language such as "C" or "C++", and also includes other languages, routines, and libraries as appropriate. The tracking subsystem 70, however, interacts with the recipient's computer to upload data relating to the recipient's responses to one or more commercials (i.e., the tracking information) from the recipient's computer to a distant server, i.e., a computer that is not local to the recipient, and that receives the tracking information. The tracking subsystem 70 may or may not reside on the distant server.

The tracking information can be as simplistic as whether or not the e-mail containing the commercial was ever received by the recipient, and if so when it was opened. More sophisticated tracking data may include file opening time, video start and stop times, cursor positioning, and forwarding of the commercial to others 150. Such information may advantageously be stored in the "cookies" section, or preferably in the registry of the recipient's computer 112. The recipient 110 may also use the commercial to click-through to one or more web sites 120 advertised on the commercial, and such click-throughs are also preferably tracked. It is especially contemplated that at least one of the web sites accessed by click-through tracks at least some recipient activities, and even more preferably also contains a video component and an audio component that may or may not be the same as that included in the commercial.

The transmission subsystem 60 is basically a web server, the software and hardware of which are now commodity items. There are, however, several preferred methods and systems that are thought to accommodate the high volume of relatively large outbound transmissions involved in sending full audio-video ecommercials. Such methods and systems are described in concurrently filed applications titled "Load Balancing Via Message Source Selection", "Message Content Based Routing", "Dynamic Routing via Shortest Delivery Time", and "Historical Delivery Time Based Routing Tables", corresponding to attorney dockets 604.12, 604.18, 604.19, and 604.20, respectively, each of which is incorporated herein by reference.

Each commercial is preferably transmitted to the prospects as an executable file, which is defined herein to mean a file that is directly interpreted or executed by the operating system of a computer as opposed to being "played" by player software. Although it is contemplated that commercials, and perhaps the tracking or playing software, can be transmitted as multiple files, it is preferred to transmit the entire commercial and all software needed to track or play the commercial as a single file. It is also contemplated that some or all of the commercial or supporting software can be downloaded separately from the transmission that includes the commercial. For example, it is contemplated that a fully functioning, multi-page commercial can be transmitted in an e-mail message. When the recipient opens the commercial, or perhaps reaches a given point in the presentation, his system contacts a distant server to download additional pages. Multi-page commercials of this type are disclosed in concurrently filed application titled "Multi-Page Executable Commercials" corresponding to attorney docket 604.09, which is incorporated herein by reference.

Considered as a whole, the electronic mailing system 1 widely disseminates commercials in executable file format, such that the commercials are stored locally to the recipient. In preferred embodiments such commercials include video and audio tracks, as well as branding graphics that are displayed to the recipient while the video is playing. More preferred embodiments also include hyperlinks that are displayed to the recipient while the video is playing. The commercials may also advantageously contain software code that tracks the recipient's response to the commercial, with the tracking information being stored locally to the recipient, and then delay transmitted to a distant server.

At least some of the tracking information is preferably stored in the recipient computer's registry. An identification code and optionally group codes may also be stored locally, again preferably in the recipient computer's registry. System 1 may be used to bring together multiple advertising messages in creating the commercials, and possibly in modifying them. System 1 may also authenticate some or all of the commercials being sent out for a given campaign.

Thus, specific embodiments and applications of individualized commercials used in electronic direct marketing have been disclosed. It should be apparent to those skilled in the art, however, that many more modifications besides those already described are possible without departing from the inventive concepts herein. The inventive subject matter, therefore, is not to be restricted except in the spirit of the appended claims. Moreover, in interpreting both the specification and the claims, all terms should be interpreted in the broadest possible manner consistent with the context. In particular, the terms "comprises" and "comprising" should be interpreted as referring to elements, components, or steps in a non-exclusive manner, indicating that the referenced elements, components, or steps may be present, or

utilized, or combined with other elements, components, or steps that are not expressly referenced.